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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/309,130	05/10/1999	MICHAEL E. RAKAUSKAS	28572/32531A	7131

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EXAMINER

KRUER, KEVIN R

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 02/19/2003

26

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/309,130

Applicant(s)

RAKAUSKAS

Examiner

Kevin R Kruer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14, 17-49 and 51-54 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 14, 17-49 and 51-54 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION
Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 53 and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Boggs (US 3,677,868). Boggs teaches a laminate comprising an upper layer of hardwood, a urea formaldehyde coated crossband, and a core comprising strips of wood (col 5, lines 37+ and FIG 4). The crossband comprises a saturated kraft paper (col 3, lines 10+).

The process limitations of claims 53 and 54 do not patentably distinguish a product claim from a product taught in the prior art unless applicant can show that the method of making the claimed product inherently results in a product that is different from the teachings of the prior art. In the present application, no such showing has been made.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 14, 17, 24, 26-29, 36-41, 48, and 50-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view of McClain (US 1,299,747). Baymiller teaches a veneered or laminated board structure comprising a wood core, a crossbanding material and a wood veneer (abstract). The core stock may comprise, for example, lumber or chip board (col 1, line 13). The crossbanding material comprises a resin-saturated sheet. The layers are assembled within a press, and subjected to pressure and elevated temperature in order to cure the resin (col 2, lines 28-38). The laminate has considerable dimensional stability and resists warping and cracking of the veneer.

Baymiller teaches a laminate comprising a crossbanding material between a wood core and veneer wherein the crossband comprises a felt material saturated with urea formaldehyde. Baymiller preferred crossband does not comprise a resin saturated kraft paper. However, Baymiller teaches that International Paper Company has made a urea formaldehyde resin saturated kraft paper sheet that could be used for crossbanding (col 1, lines 30-37). The courts have held the selection of a known material based on its suitability for its intended use supported a prima facie case of obviousness. *Sinclair & Carroll Co. V. Interchemical Corp.* 325 U.S. 327, 65 USPQ 297 (1945). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize the crossbanding material made by International Paper Company in place of the crossbanding material taught in Baymiller.

Baymiller also does not teach that a saturated resin sheet should be applied to the non-veneered surface of the substrate. However, McClain teaches that saturated

paper products may be applied to the non-veneered surface of a wood laminate in order to provide moisture, oil and acid resistance (col 4, lines 115+). The sheets are impregnated with a suitable adhesive (col 3, line 64). Therefore, it would have been obvious to one of ordinary skill in the art to apply a resin saturated paper sheet to the non-veneered surface of the laminate taught in Baymiller in order to provide oil, water, and acid resistance.

The limitations of claims 26-29, 38-41, 52, and 54 are process limitations. Process limitations do not patentably distinguish a product claim from a product taught in the prior art unless applicant can show that the method of making the claimed product inherently results in a product that is different from the teachings of the prior art. In the present application, no such showing has been made.

3. Claims 23, 35, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view of McClain (US 1,299,747), as applied to claims 14, 17, 24, 26-29, 36-41, 48, and 50-54 above, and further in view of Guyette (US 5,425,986). Baymiller in view of McClain is relied upon as above, but none of the references teach that the resin coated paper sheet should have a basis weight of about 40 pounds per ream to about 100 pounds per ream. However, Guyette teaches a high-pressure laminate comprising a fiberboard core, and intermediate resin impregnated paper sheet or lamina, and a decorative paper or lamina (abstract). Guyette teaches that the intermediate resin impregnated paper should comprise a kraft paper having a weight of 25 to about 400 grams per square meter (col 3, lines 53-58). It would have been obvious to one of ordinary skill in the art to utilize a kraft paper with a weight of 25-400 grams per square meter as the resin coated paper of the laminate taught by Baymiller, because Guyette teaches that kraft paper with such weights are

porous enough and strong enough to be used as intermediate resin impregnated sheets in wood composite laminates.

4. Claims 22, 34, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view of McClain (US 1,299,747), as applied to claims 14, 17, 24, 26-29, 36-41, 48, and 50-54 above, and further in view of Guyette (US 5,425,986). Baymiller in view of McClain is relied upon as above, but none of the references teaches that the resin should comprise about 45-65wt.% of the resin-saturated sheet. However, Guyette teaches that the resin in the resin impregnated intermediate sheet should comprise 5 to 75 percent by weight of the resin impregnated intermediate sheet. Therefore, it would have been obvious to one of ordinary skill in the art to utilize a resin-saturated sheet comprising 5-75wt.% resin because Guyette teaches that sheets comprising 5-75wt% resin exhibit sufficient adhesion to the surrounding substrates when utilized as intermediate layers in wood composite laminates.

Claims 18-21, 30-33, and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view of McClain (US 1,299,747), as applied to claims 14, 17, 24, 26-29, 36-41, 48, and 50-54 above, and further in view of Brooker et al. (US 5,723,221). Baymiller in view of McClain is relied upon as above, but none of the references teach that the resin should comprise about 98wt% melamine. However, Brooker teaches that melamine aldehyde and urea formaldehyde resins are used interchangeably as adhesives to saturate paper sheets utilized in high or low-pressure processes (col 3, lines 3+). Brooker further teaches that a variety of fillers may be added to the adhesive (col 2, lines 8+). The courts have held that substitution of equivalents requires no express motivation as long as the prior art recognizes the

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equivalency. *In re Fount* 213 USPQ 532 (CCPA 1982); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *Graver Tank & Mfg. Co. Inc. v. Linde Air Products Co.* 84 USPQ 328 (USSC 1950). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize a resin composition comprising 98wt% melamine and 2wt% other fillers in place of the urea formaldehyde resin taught in Baymiller. Furthermore, it would have been obvious to one of ordinary skill in the art to utilize a resin composition comprising 98wt% melamine and 2wt% other fillers as the adhesive taught in McClain because Brooker teaches such a composition useful as adhesives to saturate paper sheets utilized in high or low pressure processes.

Baymiller also does not admit that the adhesive resin may be a melamine/urea blend. However, Brooker teaches that urea-formaldehyde may be advantageously added discreetly or in combination with the melamine resin for use as an adhesive in both high and low pressure decorative laminates (col 3, lines 3+). Thus, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to blend urea and melamine resins in such a way as to advantageously affect the adhesion of the laminate. The courts have held that when the general conditions of a claim are known in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 f.2d 456, 105 USPQ 233, 235, (CCPA 1955). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize the melamine and urea in any combination in order to optimize adhesion, reduce shrink, and optimize processing time and costs.

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5. Claims 25 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view McClain (US 1,299,747), as applied to claims 14, 17, 24, 26-29, 36-41, 48, and 50-54 above, and further in view of Carter et al (US 5,704,134) or Sunol (US 4,992,308). Baymiller in view of McClain is relied upon as above, but neither teaches the claimed moisture content. However, Carter teaches that lumber is typically dried to an equilibrium moisture content of 6-15% (col 1, lines 10+). Similarly, Sunol teaches that wood will equilibrate to contain 4-15% moisture when left to air dry at atmospheric pressure (col 7, lines 3+). It would have been obvious to utilize wood components comprising the claimed amount of moisture because wood typically has a moisture content at atmospheric conditions of around 4-15%. Thus, commercially available lumber is going to have a moisture content of 4-15%. Furthermore, one of ordinary skill in the art would want to utilize lumber that has equilibrated because said lumber will be more dimensionally stable.

6. Claims 14, 17, 24, 26-29, 36-41, 48, and 50-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molloy et al (US 3,916,059) in view of Baymiller (US 3,816,236). Molloy teaches a laminated panel comprising a core, two crossbanding sheets, and a facing sheet (abstract). The core may comprise wood, lumber, or chips (col 3, line 58). The back sheet of the laminate may comprise a crossbanding sheet (col 3, lines 7 and 8). The layers of the laminate are placed in a press under heat and pressure to cure the resin in the crossbanding sheet (col 2, lines 15-24).

Molloy teaches a laminate comprising a crossbanding material between a wood core and veneer, but does not does not comprise a resin saturated kraft paper. However, Baymiller teaches that International Paper Company has made a urea formaldehyde resin saturated kraft paper sheet that could be used for crossbanding (col 1, lines 30-37). The courts have held the selection of a known material based on its suitability for its intended use supported a prima facie case of obviousness. *Sinclair & Carroll Co. V. Interchemical Corp.* 325 U.S. 327, 65 USPQ 297 (1945). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize the crossbanding material made by International Paper Company in place of the crossbanding material taught in Molloy.

The limitations of claims 26-29, 38-41, 52, and 54 are process limitations. Process limitations do not patentably distinguish a product claim from a product taught in the prior art unless applicant can show that the method of making the claimed product inherently results in a product that is different from the teachings of the prior art. In the present application, no such showing has been made.

7. Claims 23, 35, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molloy et al (US 3,916,059) in view of Baymiller (US 3,816,236), as applied to claims 14, 17, 24, 26-29, 36-41, 48, and 50-54 above, and further in view of Guyette (US 5,425,986). Molloy in view of Baymiller is relied upon as above, but none of the references teach that the resin coated paper sheet should have a basis weight of about 40 pounds per ream to about 100 pounds per ream. However, Guyette teaches a high-pressure laminate comprising a fiberboard core, and intermediate resin impregnated paper sheet or lamina, and a decorative paper or lamina (abstract).

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Guyette teaches that the intermediate resin impregnated paper should comprise a kraft paper having a weight of 25 to about 400 grams per square meter (col 3, lines 53-58). It would have been obvious to one of ordinary skill in the art to utilize a kraft paper with a weight of 25-400 grams per square meter as the resin coated paper of the laminate taught by Baymiller, because Guyette teaches that kraft paper with such weights are porous enough and strong enough to be used as intermediate resin impregnated sheets in wood composite laminates.

8. Claims 22, 34, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molloy et al (US 3,916,059) in view of Baymiller (US 3,816,236), as applied to claims 14, 17, 24, 26-29, 36-41, 48, and 50-54 above, and further in view of Guyette (US 5,425,986). Molloy in view of Baymiller is relied upon as above, but none of the references teaches that the resin should comprise about 45-65wt.% of the resin-saturated sheet. However, Guyette teaches that the resin in the resin impregnated intermediate sheet should comprise 5 to 75 percent by weight of the resin impregnated intermediate sheet. Therefore, it would have been obvious to one of ordinary skill in the art to utilize a resin-saturated sheet comprising 5-75wt.% resin because Guyette teaches that sheets comprising 5-75wt% resin exhibit sufficient adhesion to the surrounding substrates when utilized as intermediate layers in wood composite laminates.

9. Claims 18-21, 30-33, and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molloy et al (US 3,916,059) in view of Baymiller (US 3,816,236), as applied to claims 14, 17, 24, 26-29, 36-41, 48, and 50-54 above, and further in view of Brooker et al. (US 5,723,221). Molloy in view of Baymiller is relied upon as above, but

none of the references teach that the resin should comprise about 98wt% melamine. However, Brooker teaches that melamine aldehyde and urea formaldehyde resins are used interchangeably as adhesives to saturate paper sheets utilized in high or low pressure processes (col 3, lines 3+). Brooker further teaches that a variety of fillers may be added to the adhesive (col 2, lines 8+). The courts have held that substitution of equivalents requires no express motivation as long as the prior art recognizes the equivalency. *In re Fount* 213 USPQ 532 (CCPA 1982); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *Graver Tank & Mfg. Co. Inc. v. Linde Air Products Co.* 84 USPQ 328 (USSC 1950). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize a resin composition comprising 98wt% melamine and 2wt% other fillers in place of the urea formaldehyde resin taught in Baymiller.

Molloy also does not admit that the adhesive resin may be a melamine/urea blend. However, Brooker teaches that urea-formaldehyde may be advantageously added discreetly or in combination with the melamine resin for use as an adhesive in both high and low pressure decorative laminates (col 3, lines 3+). Thus, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to blend urea and melamine resins in such a way as to advantageously affect the adhesion of the laminate. The courts have held that when the general conditions of a claim are known in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 f.2d 456, 105 USPQ 233, 235, (CCPA 1955). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize the melamine and urea in any

combination in order to optimize adhesion, reduce shrink, and optimize processing time and costs.

10. Claims 25 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molloy et al (US 3,916,059) in view of Baymiller (US 3,816,236), as applied to claims 14, 17, 24, 26-29, 36-41, 48, and 50-54 above, and further in view of Carter et al (US 5,704,134) or Sunol (US 4,992,308). Molloy in view of Baymiller is relied upon as above, but neither teaches the claimed moisture content. However, Carter teaches that lumber is typically dried to an equilibrium moisture content of 6-15% (col 1, lines 10+). Similarly, Sunol teaches that wood will equilibrate to contain 4-15% moisture when left to air dry at atmospheric pressure (col 7, lines 3+). It would have been obvious to utilize wood components comprising the claimed amount of moisture because wood typically has a moisture content at atmospheric conditions of around 4-15%. Thus, commercially available lumber is going to have a moisture content of 4-15%. Furthermore, one of ordinary skill in the art would want to utilize lumber that has equilibrated because said lumber will be more dimensionally stable.

Response to Arguments

Applicant argues that Baymiller “teaches away from the use of kraft paper as a crossband material.” While the examiner concedes that kraft paper is not the preferred crossband material taught in Baymiller, the courts have held that preferred embodiments do not constitute a teaching away from a broader disclosure or

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nonpreferred embodiments. Furthermore, the examiner notes that a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including non-preferred embodiments.

Applicant points out that McClain's reasons for adding a resin impregnated fibrous material to the non-veneered surface of the substrate are different than the reasons cited in the application. McClain supplies a resin impregnated fibrous material to the non-veneered surface of a substrate in order to provide surface protection. Similarly, Molloy's reasons for not overlying a crossbanding sheet with a veneer are different than the reasons cited in the application. Molloy utilizes the crossbanding sheet without a veneer in order to obtain a decorative outer surface or as a backing sheet (col 3, lines 3-8). However, the courts have held that the reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant.

Thus, Applicant's arguments are not persuasive.

NOTE: the examiner takes the position that kraft paper reads on the claimed "alpha-cellulose sheet" because the majority of the pulp that makes up kraft paper is alpha-cellulose (see US 3,839,144-col 2, lines 68+; US 3,657,035- col 3, lines 42+; US 6,511,930B1-col 10, lines 55+). Furthermore, the examiner could not find an art accepted definition of "alpha-cellulose sheet" that would exclude kraft paper.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is (703) 305-0025. The examiner can normally be reached on Monday-Friday from 7:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) 308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703)305-5436.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.



Kevin R. Kruer
Patent Examiner



Paul Thibodeau
Supervisory Patent Examiner
Technology Center 1700